

PRELIMINARY TECHNICAL DESCRIPTION OF FIBER OPTIC CABLE

Cable construction

Cable type	A-DQ(ZN)2Y-(1-6)x12/ A-DQ(ZN)4Y-(1-6)x12-1081b
Standards	IEC 60793, IEC 60794
	3 4 5 6 7

Cable construction

1. Outer sheath: UV-resistant PE/PA

2. Optical loose tube: PBT Tube

3. Intramodule compound: Thixotropic compound

4. Optical Fiber: Single-mode Fiber¹
5. Rip-cord: Water-swellable yarn

6. Central strength element: Glass reinforced plastic FRP-E7. Water-blocking element of core: Water-swellable yarn

8. Core filler: PE

Temperature ranges	Storage and transportation	Installation	Operating		
	temperature	temperature	temperature		
	from -40 to +70 °C from -10 to +50 °C from -40 to +				
Resistance to water		Water resistant			
penetration					
Relative humidity at +35° C, %	98				
Outer diameter, mm	5,0±0,2				
Average weight of 1 km of the	21±5%				
cable, kg					

Mechanical characteristics

Calculated tensile strength, not less than ² , kN	
Dynamic	0,7
Minimum bending radius	20D
Short-term crush test, kN/cm (N/10cm)	0,12 (1200)
Resistance to axial torsion at angle ±360° on 2 m length cable	Resistant
Resistance to bends at angle $\pm 90^{\circ}$ with a radius equal to 20 nominal	Resistant
cable diameters	
Resistance to impact 2 J	Resistant

¹ Can be used:

^{– 250} μm Single-mode Fiber according to ITU-T G.652.D or G.652.D/G.657.A1

^{- 200} μm Single-mode Fiber according to ITU-T G.652.D/G.657.A1

 $^{^{\}rm 2}$ Tensile strength value is for maximum number of fibers design



Packaging and marking

Cable factory length, km	6
Package	Drum №10 (1000x630x1000)
Tolerance, %	±3,0
Short lengths (customer approval)	Maximum 5%
Marking method	Inkjet printing
The accuracy of marking, %	±0,5

Coloring

Coloring	Coloring of fibers in loose tube (According to Customer's requirements color can be different).										
1	2	3	4	5	6	7	8	9	10	11	12
red	green	blue	yellow	white	slate	brown	violet	aqua	black	orange	pink

Coloring of optical loose tube (According to Customer's requirements color can be different). Core-filler color is natural.							
1	2	3	4	5	6		
red	green	blue	yellow	white	slate		

Cable sheath coloring						
Sheath material	Р	Ē	PA			
Color	black	orange				

Product data

Fiber count	12	24	36	48	72
Loose tubes x fibers	1x12	2x12	3x12	4x12	6x12